Staff Report of Investigation

Fulton Substation Project

Case Number 11-4152-EL-BSB

October 29, 2012



In the Matter of the Application by ATSI for a)
	Case Number
Certificate of Environmental Compatibility and Public) 11-4152-EL-BSB
Need for the Fulton Substation Project) 11-4152-EL-DSD

Staff Report of Investigation

Submitted to the OHIO POWER SITING BOARD

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

In the Matter of the Application by ATSI for a	Case Number
Certificate of Environmental Compatibility and Public) Case Number 11-4152-EL-BSB
Need for the Fulton Substation Project) 11-4152-EL-DSD

Members of the Board:

Todd Snitchler, Chairman, PUCO Christiane Schmenk, Director, ODSA Dr. Ted Wymyslo, Director, ODH David Daniels, Director, ODA Scott Nally, Director, Ohio EPA Jim Zehringer, Director, ODNR Jeffery J. Lechak, PE, Public Member Louis Blessing, Jr., State Representative Sandra Williams, State Representative Tom Sawyer, State Senator Shannon Jones, State Senator

To the Honorable Power Siting Board:

In accordance with provisions of the Ohio Revised Code (ORC) Section 4906.07(C), and the Commission's rules, the Staff has completed its investigation in the above matter and submits its findings and recommendations in this staff report for consideration by the Ohio Power Siting Board (Board).

The *Staff Report of Investigation* has been prepared by the Staff of the Public Utilities Commission of Ohio. The findings and recommendations contained in this report are the result of Staff coordination with the Ohio Environmental Protection Agency, the Ohio Department of Health, the Ohio Development Services Agency, the Ohio Department of Natural Resources, and the Ohio Department of Agriculture. In addition, the Staff coordinated with the Ohio Department of Transportation, the Ohio Historic Preservation Office, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Federal Aviation Administration.

In accordance with ORC Sections 4906.07 and 4906.12, copies of this staff report have been filed with the Docketing Division of the Public Utilities Commission of Ohio on behalf of the Ohio Power Siting Board and served upon the Applicant or its authorized representative, the parties of record, and the main public libraries of the political subdivisions in the project area.

The staff report presents the results of the Staff's investigation conducted in accordance with ORC Chapter 4906 and the rules of the Board, and does not purport to reflect the views of the Board nor should any party to the instant proceeding consider the Board in any manner constrained by the findings and recommendations set forth herein.

Respectfully submitted,

Klaus Lambeck Chief

Facilities, Siting, & Environmental Analysis Division

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ACRONYMS

BMP best management practices

DOW ODNR Division of Wildlife

FAA Federal Aviation Administration

kV kilovolts

MW megawatts

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places

OAC Ohio Administrative Code

ODA Ohio Department of Agriculture

ODSA Ohio Development Services Agency

ODH Ohio Department of Health

ODNR Ohio Department of Natural Resources

ODOT Ohio Department of Transportation

Ohio EPA Ohio Environmental Protection Agency

OHPO Ohio Historic Preservation Office

OPSB Ohio Power Siting Board

ORC Ohio Revised Code

PUCO Public Utilities Commission of Ohio

SPCC Spill Prevention, Containment, and Countermeasure

SWPPP Storm Water Pollution Prevention Plan

USFWS U.S. Fish and Wildlife Service

I. POWERS AND DUTIES

OHIO POWER SITING BOARD

The Ohio Power Siting Board (Board or OPSB) was created in 1972. The Board is a separate entity within the Public Utilities Commission of Ohio (PUCO). The authority of the Board is outlined in Ohio Revised Code (ORC) Chapter 4906.

The Board is authorized to issue certificates of environmental compatibility and public need for the construction, operation, and maintenance of major utility facilities as defined in ORC Section 4906.01. Included within this definition are: electric generating plants and associated facilities designed for, or capable of, operation at 50 megawatts (MW) or more; electric transmission lines and associated facilities of a design capacity greater than or equal to 125 kilovolts (kV); and gas and natural gas transmission lines and associated facilities designed for, or capable of, transporting gas or natural gas at pressures in excess of 125 pounds per square inch. In addition, per ORC Section 4906.20, the Board authority applies to economically significant wind farms, defined in ORC 4906.13(A) as wind turbines and associated facilities with a single interconnection to the electrical grid and designed for, or capable of, operation at an aggregate capacity of five MW or greater but less than 50 MW.

Membership of the Board is specified in ORC Section 4906.02(A). The voting members include: the Chairman of the PUCO who serves as Chairman of the Board; the directors of the Ohio Environmental Protection Agency (Ohio EPA), the Ohio Department of Health (ODH), the Ohio Development Services Agency (ODSA), the Ohio Department of Agriculture (ODA), and the Ohio Department of Natural Resources (ODNR); and a member of the public, specified as an engineer, appointed by the Governor from a list of three nominees provided by the Ohio Consumers' Counsel. Ex-officio Board members include two members (with alternates) from each house of the Ohio General Assembly.

NATURE OF INVESTIGATION

The OPSB has promulgated rules and regulations, found in Chapter 4906 of the Ohio Administrative Code (OAC), which establish application procedures for major utility facilities and wind farms.

Application Procedures

Any person that wishes to construct a major utility facility or economically significant wind farm in this state must first submit to the OPSB an application for a certificate of environmental compatibility and public need. The application must include a description of the facility and its location, summary of environmental studies, a statement explaining the need for the facility and how it fits into the applicant's energy forecasts (for transmission projects), and any other information the OPSB may consider relevant.

Within 60 days of receiving an application, the OPSB must determine whether the application is sufficiently complete to begin an investigation.³ If an application is considered complete, the Chairman of the OPSB will cause a public hearing to be held 60 to 90 days after the official filing date of the completed application. At the public hearing, any person may provide written

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¹ ORC 4906.04 and 4906.20

² ORC 4906.10(A)(1) and 4906.20(B)(1)

³ OAC 4906-5-05(A)

or oral testimony and may be examined by the parties.⁴ Parties include the Applicant, public officials, and any person who has been granted a motion of leave for intervention.⁵

Staff Investigation and Report

The Chairman will also cause each application to be investigated and a report published not less than 15 days prior to the public hearing. The report sets forth the nature of the investigation and contains the findings and conditions recommended by Staff. The Board's Staff, which consists of career professionals drawn from the Staff of the PUCO and other member agencies of the OPSB, coordinates its investigation among the agencies represented on the Board and with other interested agencies such as the Ohio Department of Transportation (ODOT), the Ohio Historical Society, and the U.S. Fish and Wildlife Service (USFWS).

The technical investigations and evaluations are conducted under guidance of the OPSB rules and regulations in OAC Chapter 4906. The recommended findings resulting from the Staff's investigation are described in the staff report pursuant to ORC Section 4906.07(C). The report does not represent the views or opinions of the OPSB and is only one piece of evidence that the Board may consider when making its decision. Once published, the report becomes a part of the record and is served upon all parties to the proceeding and is made available to any person upon request. A record of the public hearings and all evidence, including the staff report, may be examined by the public at any time.

Board Decision

The OPSB may approve, modify and approve, or deny an application for a certificate of environmental compatibility and public need. If the OPSB approves, or modifies and approves an application, it will issue a certificate subject to conditions. The certificate is also conditioned upon the facility being in compliance with standards and rules adopted under the ORC.⁸

Upon rendering its decision, the OPSB must issue an opinion stating its reasons for approving, modifying and approving, or denying an application for a certificate of environmental compatibility and public need. A copy of the OPSB's decision and its opinion is memorialized upon the record and must be served upon all parties to the proceeding. Any party to the proceeding that believes its issues were not adequately addressed by the OPSB may submit within 30 days an application for rehearing. An entry on rehearing will be issued by the OPSB within 30 days and may be appealed within 60 days to the Supreme Court of Ohio.

⁵ ORC 4906.08(A)

⁴ ORC 4906.07

⁶ ORC 4906.07(C) and 4906.10

⁷ ORC 4906.09 and 4906.12

⁸ ORC 4906.10(A) and (B)

⁹ ORC 4906.11

¹⁰ ORC 4906.10(C)

¹¹ ORC 4903.10 and 4906.12

¹² ORC 4903.11, 4903.12, and 4906.12

CRITERIA

The recommendations and conditions in this *Staff Report of Investigation* were developed pursuant to the criteria set forth in ORC Section 4906.10(A), which reads in part:

The Board shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the Board, unless it finds and determines all of the following:

- (1) The basis of the need for the facility if the facility is an electric transmission line or gas or natural gas transmission line;
- (2) The nature of the probable environmental impact;
- (3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;
- (4) In the case of an electric transmission line or generation facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability;
- (5) That the facility will comply with Chapters 3704., 3734., and 6111. of the Revised Code and all rules and standards adopted under those chapters and under Sections 1501.33, 1501.34, and 4561.32 of the Revised Code. In determining whether the facility will comply with all rules and standards adopted under Section 4561.32 of the Revised Code, the Board shall consult with the ODOT Office of Aviation of the Division of Multi-Modal Planning and Programs of the Department of Transportation under Section 4561.341 of the Revised Code.
- (6) That the facility will serve the public interest, convenience, and necessity;
- (7) In addition to the provisions contained in divisions (A)(1) through (A)(6) of this section and rules adopted under those divisions, what its impact will be on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929. of the Revised Code that is located within the site and alternative site of the proposed major utility facility. Rules adopted to evaluate impact under division (A)(7) of this section shall not require the compilation, creation, submission, or production of any information, document, or other data pertaining to land not located within the site and alternate site.
- (8) That the facility incorporates maximum feasible water conservation practices as determined by the Board, considering available technology and the nature and economics of the various alternatives.

II. APPLICATION

APPLICANT

American Transmission Systems, Incorporated (ATSI or Applicant) is seeking authority to construct a transmission substation and associated transmission lines in Fulton Township in Fulton County, OH. ATSI will construct, own, operate, and maintain the proposed Hayes Substation.

ATSI is a wholly-owned subsidiary of The FirstEnergy Corporation. FirstEnergy Corp. was formed in 1997 through the merger of Ohio Edison Company and Centerior Energy Corporation. Through this merger, FirstEnergy became the holding company for Ohio Edison and its Pennsylvania Power Company subsidiary, as well as The Cleveland Electric Illuminating Company and The Toledo Edison Company.

In 2011, FirstEnergy completed a merger with Allegheny Energy, a Greensburg, PA-based company that served 1.6 million customers in Pennsylvania, West Virginia, Maryland and Virginia. The merger more than doubled FirstEnergy's highly efficient, supercritical coal capacity and provided opportunities for the company to grow and expand into new markets with a stronger, more focused competitive operation. Today, FirstEnergy is one of the nation's largest investor-owned electric systems based on the number of customers served.

HISTORY OF THE APPLICATION

Prior to formally submitting its application, the Applicant consulted with the Staff and representatives of the Board, including the Ohio EPA, regarding application procedures.

On July 28, 2011, the Applicant held a public information meeting regarding the proposed electric substation project.

On June 1, 2012, the Applicant filed a motion for waiver of the one-year notice provision. Staff did not object to this waiver.

On June 15, 2012, the Applicant filed the Fulton Substation Project application.

On August 15, 2012, the Applicant was issued a letter of compliance regarding the application from the Chairman of the Board.

A local public hearing has been scheduled for November 13, 2012, at 6:00 p.m., at the Valleywood Golf Club, 13501 Airport Highway, Swanton, Ohio 43558. The adjudicatory hearing will commence on November 26, 2012, at 10:00 a.m., in Hearing Room 11-C, at the offices of the PUCO, 180 East Broad Street, Columbus, Ohio.

This summary of the history of the application does not include every filing in case numbers 11-4152-EL-BSB. The docketing record for this case, which lists all documents filed to date, can be found in the Appendix to this report and online at http://dis.puc.state.oh.us.

PROJECT DESCRIPTION

ATSI proposes to construct, own, operate, and maintain the Fulton Substation in Fulton Township, Fulton County, Ohio. The project is needed to reinforce ATSI's transmission system, and maintain an adequate level of reliability and availability of electric power for customers in Toledo Edison's western service area.

The substation would have three 345 kV transmission line exits and two 138 kV transmission line exits, which would provide connections to the North Star Steel, Allen Junction, Delta, Swanton, and Midway substations. The proposed connections to the Fulton Substation have been submitted separately to the Board as Letters of Notification (case numbers 12-2461-BLN) and 12-2462-EL-BLN).

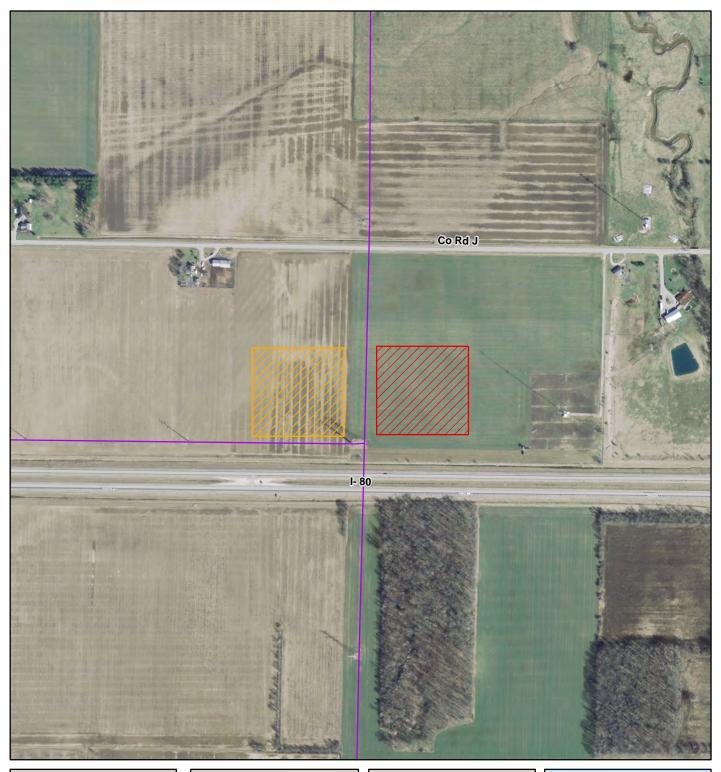
The Applicant has proposed two locations for the Fulton Substation for the Board's consideration (hereinafter referred to as a Preferred and Alternate). Both sites would require approximately four acres of land. The substation would be fenced and contain a 345 kV to 138 kV transformer, breakers, and a control building.

The Preferred Site is located on a 26-acre parcel immediately north of Interstate I-80/90. ATSI owns this property, and it is currently used as agricultural land. The parcel is approximately a half-mile east of the intersection of County Road J and County Road 3. The Alternate Site is on privately-owned land adjacent to the western boundary of the Preferred Site. Proposed access to the Fulton Substation would be from County Road J.

The Applicant plans to begin construction in January 2013 and place the facility in service by December 2013. The Preferred and Alternate sites are shown on the map in this report.

PROJECT MAP

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Overview Map

11-4152-EL-BSB

Fulton Substation

Maps are presented solely for the purpose of providing a visual representation of the project in the staff report, and are not intended to modify the project as presented by the Applicant in its certified application and supplemental materials.

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III. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the matter of the application of ATSI, the following considerations and recommended findings are submitted pursuant to ORC Section 4906.07(C) and ORC Section 4906.10(A).

Considerations for ORC Section 4906.10(A)(1)

BASIS OF NEED

Purpose of Proposed Facility

The purpose of the Fulton Substation Project and associated projects is to reinforce the western portion of ATSI's transmission system in the Toledo Edison service territory. The 345 kV to 138 kV Fulton Substation will provide additional operational reliability to the area to comply with required FirstEnergy, PJM Interconnection, and North American Electric Reliability Corporation planning criteria. PJM, the regional system planning authority, has determined that the ATSI system needs reinforcement to maintain reliability due to increased electrical demands. Without the upgrades, the system is at a greater risk of exceeding its capabilities, which could result in a loss of power to end use customers. This section of the staff report focuses on reviewing the need of the proposed substation.

Long Term Forecast

The proposed substation project has been identified in the 2011 *American Transmission Systems, Incorporated Long-Term Forecast Report to the Public Utilities Commission of Ohio*. The Public Utilities Commission assigned this document case number 11-1435-EL-FOR.

PJM Regional Transmission Expansion Plan

PJM annually publishes the Regional Transmission Expansion Plan (RTEP). The RTEP summarizes the results of planning studies and explains the rationale behind system upgrades that are needed to maintain reliability within the PJM footprint. Stakeholders are encouraged to participate in the Transmission Expansion Advisory Committee, which provides advice and recommendations to aid in the development of the RTEP.

The proposed substation project was identified in the 2011 PJM RTEP¹³ and approved by the PJM Board. PJM's analysis shows that, without the proposed Fulton Substation Project, several transmission lines fail to meet system reliability planning criteria and may experience thermal and voltage violations.

Load Growth

PJM projects that electric demand will grow at an average rate of approximately 1 percent ¹⁴ in the ATSI footprint. Since the year 2000, demand has been increasing at approximately 0.8 percent. ATSI loading data indicates that the distribution load in the Holland, Ohio area, east of the proposed substation, has been growing at a rate of 5-10 percent per year. The Applicant expects future load growth in the Toledo area to increase by 1-2 percent per year. PJM's ten-year

PJM 2011 Regional Transmission Expansion Plan, February 28, 2012. p.70. Retrieved September 28, 2012, from http://pjm.com/documents/reports/rtep-report.aspx

¹⁴ PJM 2012 Load Forecast Report, January 2012. Retrieved September 28, 2012, from http://pjm.com/~/media/documents/reports/2012-pjm-load-report.ashx

summer load growth average for the entire footprint is 1.4 percent. In addition, PJM forecasts that summer peak load will increase by approximately 28 percent on the 138 kV transmission system between Wauseon and Wentworth substations.

System Economy and Reliability

The proposed Fulton Substation Project would increase reliability in the Toledo Edison service territory by adding a third 345 kV to 138 kV source in western Toledo Edison. Future customer load additions would be easily accommodated due to a more robust system. In addition, North Star Steel, a 345 kV transmission customer, is currently receiving electricity through a line tap from the Allen Junction-Midway 345 kV transmission line. The Fulton Substation would provide a new breaker position to create a new Fulton-North Star Steel 345 kV transmission line. The new line, which will be filed under a separate application to the Board, would improve reliability during any planned or unplanned outages. A more-detailed investigation of voltage and electric grid concerns may be found in the Electric Grid section of this report.

Conclusion

Staff concludes that ATSI has demonstrated the basis of need due to the projected load growth and the inability of the transmission system to meet system reliability standard criteria established by NERC and PJM. PJM identified this project in their transmission explanation plan and the PJM Board approved the project for construction.

Recommended Findings

Staff recommends that the Board find that the basis of need for the project has been demonstrated and therefore complies with the requirements specified in ORC Section 4906.10(A)(1), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(2)

NATURE OF PROBABLE ENVIRONMENTAL IMPACT

Pursuant to ORC Section 4906.10(A)(2), the Board must determine the nature of the probable environmental impact of the proposed facility. Staff has found the following with regard to the nature of the probable environmental impact:

Socioeconomic Impacts

Demographics

The project is located within the unincorporated portion of Fulton Township in Fulton County, a predominantly rural area approximately 0.8 miles northwest of Swanton. The area contains large agricultural tracts, wooded areas, and scattered residences. Over the last ten years, the population of this region has peaked and is now estimated to be in decline. According to the U.S. Census, the population of Fulton County increased between the years of 2000 and 2010 by 1.4 percent, from 42,100 to 42,698. 15 Over the same period, the population of Fulton Township declined by two percent, from 3,261 to 3,182. ¹⁶ In 2010, Fulton Township had an average population density of 110 persons per square mile, compared to 105 persons per square mile in Fulton County. 17 According to the Ohio Department of Development (now the Ohio Development Services Agency), the population of both Fulton Township and Fulton County decreased by approximately 0.4 percent between 2010 and 2011. The project is not expected to impact the demographics of the region.

Land Use

Two residences are located within 1,000 feet of the Preferred Site. These residences are located approximately 736 feet to the northwest of the site and approximately 850 feet to the northeast of the site along County Road J. One residence is located within 1,000 of the Alternate Site. This residence is approximately 450 feet to the northwest of the site along County Road J. No residences would be relocated or removed for the construction of the substation at either the Preferred or Alternate site. The majority of residential impacts would be temporary, associated with construction of the facilities. Construction and operation of the substation is not expected to affect residential land use patterns in the vicinity of the project.

No commercial, industrial, institutional, or recreational land uses are located within 1,000 feet of the either the Preferred or Alternate site. No adverse impacts to these land uses are expected as a result of construction or operation of the substation.

Both the Preferred and Alternate sites are located entirely on agricultural land, which has been previously used for growing row crops. The majority of land within 1,000 feet of either site is also agricultural. Construction of the substation on either site would take approximately five acres out of agricultural production. However, potential impacts to surrounding agricultural land would be temporary in nature, consisting of short-term soil compaction and damage to crops and

¹⁵United States Census. American Factfinder2. Profile of General Demographic Characteristics: 2010 Census 2010 Summary File 1 (SF1) 100 Percent Data and General Demographic Characteristics. Retrieved September 18, 2012, from the U.S. Census Bureau web site: http://factfinder2.census.gov

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ohio Department of Development. July 2011. 2011 Population Estimates by County, City, Village, and Township. Retrieved, October 12, 2012, from the ODOD web site: http://development.ohio.gov/files/research/P5027.pdf

underground drainage tiles. Following construction, land outside the project footprint would be returned to agricultural use.

As a means of mitigating the potential for erosion or sedimentation on nearby agricultural land that may result during project construction, the Applicant would develop a Storm Water Pollution Prevention Plan for the project that would include silt fencing, straw bales, and other erosion and sedimentation management practices. The Applicant would also provide mitigation for damage to crops and underground drainage systems from construction, operation, and maintenance activities on all adjacent properties. Following substation construction and final grading, disturbed land would be restored to its original condition.

Cultural and Archaeological Resources

No previously-recorded archaeological sites, National Register of Historic Places (NRHP) structures, or Ohio Historic Inventory (OHI) structures were identified within 1,000 feet of the project. The Applicant retained a consultant to conduct a Phase 1 Cultural Resources Survey of the project area, consisting of an archaeological survey and an architectural survey. The archaeological investigation included a background review, a pedestrian walk-over, and a shovel testing of the project area. No archaeological sites were identified in the vicinity of the project. The architectural survey included a windshield survey of buildings and structures in or adjacent to the project area. Five historic buildings were identified within the project area. However, extensive structural alterations to these buildings have rendered them ineligible for the NRHP. The Ohio Historic Preservation Office reviewed the Phase 1 Cultural Resources Survey for this project and concluded that no historic properties would be affected by project construction, operation, or maintenance.

Aesthetics

Both the Preferred and Alternate sites are located in remote agricultural land. A substation located at either the Preferred or Alternate site would be clearly visible from two nearby residences along County Road J. However, existing large-scale utility facilities, including two communication towers and two transmission lines, are located in the project vicinity. Moreover, both the Preferred and Alternate site are directly adjacent to the Ohio Turnpike. The character of the surrounding countryside is shaped by this major transportation and utility infrastructure. Consequently, siting a large-scale substation at this location would not transform the aesthetic context of the surrounding landscape. Due to the proximity between the Preferred and Alternate site, the aesthetic impacts associated with either location are similar.

Economics

The estimates of applicable intangible and capital costs for the Preferred and Alternate site of the Fulton Substation are \$9,188,029 and \$9,239,000, respectively. The approximate increase in annual property taxes for both the Preferred Site and Alternate Site over the first year of the project is \$825,316 for Fulton County and \$41,493 for Fulton Township.

All Staff recommendations for the requirements discussed in this section can be found under the **Socioeconomic Conditions** heading of the <u>Recommended Conditions of Certificate</u>.

Ecological Impacts

Surface Waters

No streams, wetlands, lakes, ponds, reservoirs, or Federal Emergency Management Agency flood zones were delineated within 100 feet of either the Preferred or Alternate sites. One 0.11 acre category 1 wetland was identified within 200 feet of the Preferred Site. The Applicant has

indicated that minimal to no construction impacts are expected to this resource, and that it would not be accessible to vehicles and equipment related to the construction of the project. Impacts to nearby surface waters would be further minimized by the implementation of a Storm Water Pollution Prevention Plan (SWPP) and best management practices (BMPs). Additionally, no impacts would be expected as a result of operation or maintenance of the facility.

Threatened and Endangered Species

The Applicant requested information from the ODNR and the USFWS regarding state- and federally-listed threatened and endangered plant and animal species. Additional information was provided through field assessments and review of published ecological information. The following table reflects the results of the information requests, field assessments, and document review.

			BIRDS		
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area	
bald eagle	Haliaeetus leucocephalus	BGEPA & MBTA ¹⁹	N/A	Known range. If any active nests are located within 660 feet of the project, then further coordination with ODNR and OPSB Staff would be recommended.	
lark sparrow	Chondestes grammacus	N/A	Endangered	Known range, no suitable habitat available	
		REPTILES	& AMPHI	BIANS	
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area	
Eastern massasauga	Sistrurus catenatus	Candidate Species	Endangered	Known range, no suitable habitat available	
		MA	AMMALS		
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area	
Indiana bat	Myotis sodalis	Endangered	Endangered	Known range, no suitable habitat available	
		FRESH W	ATER MUS	SSELS	
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area	
rayed bean	Villosa fabalis	Proposed Endangered	Endangered	Known range, no suitable habitat available	
		II	NSECTS		
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area	
purplish copper	Lycaena helloides	N/A	Endangered	Known range, no suitable habitat available	
singed pinion	Lithophane semiusta	N/A	Endangered	Known range, no suitable habitat available	
folded satyr	Ufeus plicatus	N/A	Endangered	Known range, no suitable habitat available	

Staff recommends that the Applicant contact the ODNR Division of Wildlife for the location(s) of the eagle nest(s) in the county. If any active nests are located within 660 feet of the project, then further coordination with ODNR and OPSB Staff would be recommended.

¹⁹ bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act

None of the species listed above were identified during August 2011 field surveys and they are not expected to be negatively impacted by the proposed project, including the Indiana bat and its suitable habitat.

Vegetation

The vegetative communities within the boundaries of the Preferred and Alternate sites are limited to agricultural land. Impacts associated with both sites would be limited to removal of approximately five acres of cultivated crops. Property owners would be compensated for any crop damage that would result from construction of this project. No other vegetative community types would be removed as a result of this project. Staff concludes that no significant vegetative impacts are expected at either site.

All Staff recommendations for the requirements discussed in this section can be found under the **Ecological Conditions** of the <u>Recommended Conditions of Certificate</u>.

Recommended Findings

The Staff recommends that the Board find that the nature of the probable environmental impact has been determined for the proposed facility, and therefore complies with the requirements specified in ORC Section 4906.10(A)(2), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(3)

MINIMUM ADVERSE ENVIRONMENTAL IMPACT

Pursuant to ORC Section 4906.10(A)(3), the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations.

Site Selection

The Applicant identified Preferred and Alternate sites that would meet economic and engineering requirements for the project, while also minimizing associated ecological, cultural, and land use impacts. A project study area was defined to include land within approximately three square miles of two existing transmission line intersection points: the North Star Steel 345 kV transmission line connection to the Allen Junction-Midway 345 kV transmission line; and the Allen Junction-Midway 345 kV transmission line intersection with the Delta-Swanton 138 kV transmission line. The consultant then identified and mapped land use, environmental, cultural, and engineering features in the study area that represent possible advantages or constraints to project construction.

Primary constraints included woodlots, wetlands, habitat of endangered or threatened species, sensitive land uses, and sites of historic or archaeological significance. Five potential properties were identified that contain desirable attributes and avoid major constraints to the greatest extent practicable. The consultant ranked the overall desirability of these potential sites based on their quantitative and qualitative characteristics. The Applicant then selected the two highest ranking locations as the Preferred and Alternate sites. Due to a high degree of attribute homogeneity between the candidate locations, the selection of the Preferred and Alternate sites was largely determined by site control and engineering considerations. The Preferred Site is owned by the Applicant and would require the least amount of new transmission line construction. The Alternate Site is under private ownership and would require the second least amount of new transmission line construction.

Minimizing Impacts

The construction of this substation would require approximately four acres, with the balance of the land use expected to return to agricultural production upon project completion. The Preferred Site is located on a 26-acre agricultural parcel that is owned by the Applicant. The Alternate Site is located on an agricultural district parcel, thus presenting more potential impact to agricultural land use. Both the Preferred and Alternate sites are located adjacent to the Interstate 80 turnpike. Residential density is quite low for both sites. The Preferred Site would require the least amount of transmission line construction. This project is not expected to affect any historical property or cultural resource. Aesthetic impacts are minor and similar for both sites. The Preferred Site would cost about \$50,000 less to construct. No streams, wetlands, ponds, or other sensitive water features are present within 100 feet of either substation site footprint. It is unlikely that any significant vegetative clearing would be required. With the utilization of best management practices, construction at either site presents no significant ecological impacts.

Conclusion

While the Preferred and Alternate sites are viable options, the Preferred Site minimizes overall land use impacts. Staff concludes that the selection of the Preferred Site represents the minimum adverse environmental impact.

Recommended Findings

The Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact, and therefore complies with the requirements specified in ORC Section 4906.10(A)(3), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled <u>Recommended Conditions of Certificate</u>.

Considerations for ORC Section 4906.10(A)(4)

ELECTRIC GRID

Pursuant to ORC Section 4906.10(A)(4), the Board must determine that the proposed electric facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facility will serve the interests of electric system economy and reliability.

The purpose of this section is to evaluate the impact of integrating the proposed Fulton Substation Project into the existing regional transmission grid. The Fulton Substation Project and associated projects would reinforce the western portion of ATSI's transmission system in the Toledo Edison service territory. The reinforcements would ensure quality of electric service and operational reliability, which is required by FirstEnergy, PJM Interconnection, and North American Electric Reliability Corporation planning criteria. In addition to the Fulton Substation Project, the local and regional electric system will need additional enhancements to maintain reliability. The additional projects will be submitted under separate applications to the Board. Below is a list of associated projects:

- Extend the existing Allen Junction-Midway 345 kV transmission line to the 345 kV side breakers of Fulton Substation to create the Allen Junction-Fulton 345 kV transmission line and the Fulton-Midway 345 kV transmission line;
- Extend the Allen Junction-Midway 345 kV transmission line tap to North Star Steel to the 345 kV side breakers of the Fulton Substation to create the Fulton-North Star Steel 345 kV transmission line; and
- Extend the Delta-Swanton 138 kV transmission line to the 138 kV side breakers of the Fulton Substation to create the Delta-Fulton 138 kV transmission line and the Fulton-Swanton 138 kV transmission line.

To alleviate the voltage and thermal problems, ATSI plans to use the Allen Junction-Midway 345 kV transmission line to provide a new connection and source to supply the Delta-Swanton 138 kV transmission line. The addition of the proposed substation would provide an additional 345 kV source, which is needed to reinforce the Delta-Swanton 138 kV transmission line. The proposed substation would be constructed near the midpoint of the Delta-Swanton 138 transmission line.

PJM Interconnection

PJM annually publishes the Regional Transmission Expansion Plan (RTEP). The RTEP summarizes the results of planning studies and explains the rationale behind system upgrades that are needed to maintain reliability within the PJM footprint. Stakeholders are encouraged to participate in the Transmission Expansion Advisory Committee, which provides advice and recommendations to aid in the development of the RTEP.

The proposed substation project was identified in the 2011 PJM RTEP²⁰ and approved by the PJM Board. PJM's analysis shows that, without the proposed Fulton Substation Project, several

²⁰ PJM 2011 Regional Transmission Expansion Plan, February 28, 2012. p.70. Retrieved September 21, 2012, from http://pjm.com/documents/reports/rtep-report.aspx

transmission lines do not meet planning criteria and may experience thermal and voltage violations.

Generator Deliverability

The annual generator deliverability assessment is run to ensure the transmission system has the resources to deliver the output of all generators to the remainder of PJM during peak system conditions. The analysis is performed by ramping up generation in one area and scaling down generation in another area, under many scenarios and contingencies, to verify that all of the generators' output is able to be delivered. The results revealed that one generator queue project would not be deliverable. The addition of the proposed Fulton Substation Project and associated projects allows the queue project to be deliverable.

NERC Category B & C

The North American Electric Reliability Corporation (NERC) is responsible for the development and enforcement of the federal government's approved reliability standards, which are applicable to all owners, operators, and users of the bulk power system. NERC requires planners of the bulk electric transmission system to meet Reliability Standards²¹ TPL-001-0.1 through TPL-004-0 under transmission outage conditions for categories A, B, C, and D contingencies. According to NERC, a contingency is an unexpected failure or outage of a system component, such as a generator, transmission line, circuit breaker, switch, or other electrical element. Below is a partial list of the NERC categories and their meanings:

- Category B (single contingency outage, n-1), the planning authority and transmission planner shall demonstrate that the interconnected transmission system can operate to supply projected customer demands and firm transmission service at all demand levels over the range of forecast system demand; and,
- Category C (multiple contingency outages, n-1-1), the planning authority shall demonstrate that the interconnected transmission system can operate to supply projected customer demands and firm transmission service at all demand levels over the range of forecast system demand and may rely upon the controlled interruption of customers or curtailment of firm transmission service.

During system normal conditions and categories B and C system outages, transmission lines shall not exceed their conductor thermal rating, and substation bus voltages must range from 0.95 per unit to 1.05 per unit with a minimum contingency voltage of .092 per unit. Transformer ratings are specific to each transformer and are based on seasonal conditions, considering loss of life and thermal stresses, and ratings should not be exceeded during normal conditions or emergency conditions.

ATSI used NERC categories B and C for contingency planning of the Fulton Substation Project. The following table shows a partial list of thermal overloads. As seen on the table, thermal loading is reduced while the Fulton Substation Project is in-service.

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North American Electric Reliability Corporation, Reliability Standards, Transmission Planning (TPL-001-0.1-TPL-004-0). Retrieved September 28, 2012, from http://www.nerc.com/page.php?cid=2|20

Fulton Substation Project - Partial List of Thermal Overloads

Category B (Single Element Outage)

Element Loaded	Contingency	Percent Rating WITHOUT Fulton	Percent Rating WITH Fulton	Percent Decrease
Naomi Jet-Wauseon	Wentworth to 3-terminal point open (Radial)	96	21	-75%
Jackman-Vulcan	Jackman-Toledo Hospital 138	103	83	-20%
Jackman-Toledo Hospital	Jackman-Vulcan 138	102	82	-20%
Category C (Multiple Element Outage)				
BP-Fort Industry	Bayshore-Jeep Bayshore-GM	104	97	-7%
	Bayshore-Jeep Allen Jet Xfmr	102	90	-12%
Jackman-Smuckers #2	Bayshore-Jeep Bayshore-GM	102	96	-6%
	Bayshore-Jeep Allen Jet Xfmr	100	88	-12%
Jeep-Dixie	Bayshore-GM Allen Jet Xfmr	97	85	-12%
Lemoyne-Brim	Lemoyne-Maclean 138 Midway Xfmr	101	88	-13%
	Lemoyne-Midway Q7 138 Midway Xfmr	100	85	-15%

Conclusion

The Applicant provided details on studies that were performed by ATSI and PJM. These studies demonstrated that, without the proposed Fulton Substation Project and associated projects, ATSI would be unable to provide safe, reliable electric service. When the proposed Fulton Substation and associated projects are in-service, losses would be reduced by 5 MW and 24 MVAR, reliability would be increased by the addition of a third 345 kV to 138 kV source in western Toledo Edison service area, and ATSI, NERC, and PJM planning criteria would be met. The proposed facility is consistent with plans for expansion of the regional power system, and serves the interests of electric system economy and reliability.

Recommended Findings

The Staff recommends that the Board find that the proposed facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facility would serve the interests of electric system economy and reliability. Therefore, the facility complies with the requirements specified in ORC Section 4906.10(A)(4), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(5)

AIR, WATER, SOLID WASTE, AND AVIATION

Pursuant to ORC Section 4906.10(A)(5), the facility must comply with specific sections of the ORC regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

Air

Air quality permits are not required for construction of the proposed facility. However, fugitive dust rules adopted pursuant to the requirements of ORC Chapter 3704 (air pollution control laws) may be applicable to the proposed facility. The Applicant will control fugitive dust through dust suppression techniques such as irrigation, mulching, or application of tackifier resins. These methods of dust control are sufficient to comply with fugitive dust rules.

Water

Neither construction nor operation of the proposed facility would require the use of significant amounts of water, so requirements under ORC Sections 1503.33 and 1501.34 are not applicable to this project.

No surface water resources would be directly impacted by construction or operation at the Preferred or Alternate site. Therefore, neither a 404 Army Corps Permit nor an Ohio EPA 401 Water Quality Certification would be required for construction or operation of this facility.

The Applicant has indicated that it intends to submit a Notice of Intent (NOI) for coverage under the Ohio EPA's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity, and a related Storm Water Pollution Prevention Plan (SWPPP). This SWPPP will be developed for the project pursuant to Ohio EPA regulations and will conform to the ODNR's Rainwater and Land Development Manual. Following the SWPPP, as well as using BMPs for construction activities, would help minimize erosion-related impacts to wetlands. Wetlands shall be clearly identified before commencement of construction. No construction or access would be permitted in these areas unless clearly specified in the construction plans and specifications, thus minimizing any clearing-related disturbance to surface water bodies. Construction of this facility would comply with requirements of ORC Chapter 6111, and the rules and laws adopted under this chapter.

Solid Waste

The Applicant indicates that solid waste generated from construction activities would be primarily construction material waste, and that rock and wood debris should be minimal due to the agricultural use of the sites. The Applicant estimates that approximately 200 cubic yards of construction debris could be generated from the project. All construction-related debris would be disposed of in Ohio EPA-approved landfills, or other appropriately-licensed and operated facilities.

Any contaminated soils discovered or generated during construction would be handled in accordance with applicable regulations. The Applicant states that all on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage, and workers would follow manufacturer's recommendations for any spill cleanup. Petroleum products will be stored in tightly-sealed, clearly-labeled containers. Vegetation waste from clearing activities will be removed. Additionally, Staff recommends that the Applicant be required to prepare a Spill Prevention, Containment, and Countermeasure (SPCC) Plan. With

Staff's recommended conditions, the Applicant's solid waste disposal plans comply with solid waste disposal requirements in ORC Chapter 3734, and the rules and laws adopted under this chapter.

Aviation

The Toledo Express Airport is located approximately 3.5 miles southeast of the project area, and the Fulton County Airport is approximately 10.5 miles west of the project. The height of the tallest anticipated above-ground structure and construction equipment is 86 feet, which is significantly less than that of the adjacent existing transmission line. Therefore, there are no anticipated impacts of the project on airports, landing strips, or heliports in the vicinity.

In accordance with ORC 4561.32, Staff contacted the Ohio Office of Aviation during review of this application in order to coordinate review of potential impacts of the facility on local airports. As of the date of preparation of this report, no such concerns have been identified. Construction and operation at neither the Preferred Site nor the Alternate Site is expected to have an impact on aviation.

All Staff recommendations for the requirements discussed in this section can be found under the **Air, Water, Solid Waste, and Aviation Conditions** heading of the <u>Recommended Conditions</u> of Certificate.

Recommended Findings

The Staff finds that the proposed facility complies with the requirements specified in ORC Section 4906.10(A)(5), provided that any certificate issued by the Board for the certification of the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(6)

PUBLIC INTEREST, CONVENIENCE, AND NECESSITY

Pursuant to ORC Section 4906.10(A)(6), the Board must determine that the facility will serve the public interest, convenience, and necessity.

The Fulton Substation Project's purpose is to maintain, improve, and reinforce electric service quality and reliability for communities in the western Toledo Edison service area. The Fulton Substation Project provides an extra 345/138 kV transformation source for the area and mitigates all potential thermal and voltage violations in the current local 138 kV transmission system. According to the Applicant, this extra 345/138 kV source is the most feasible and least impactful method to alleviate thermal overload and under-voltage issues. The substation project would serve the public interest because it would ensure that future electrical supply needs are met at a reasonable cost to consumers, even during periods of peak demand.

The Applicant will comply with safety standards set by the Occupational Safety and Health Administration, the Public Utilities Commission of Ohio, NERC Mandatory Reliability Standards, and equipment specifications. The Applicant has designed the facility to meet the requirements of the National Electric Safety Code.

Radio or television interference is not expected to occur from the operation of the proposed substation at either the Preferred or Alternate site. Any likely source of radio or television interference would be a localized effect primarily from defective hardware that should be easily detected and replaced.

EMF

Transmission lines, when energized, generate electromagnetic fields (EMF). Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. However, there have been concerns that EMF may have impacts on human health.

Because these concerns exist, the Applicant is required to compute the EMF associated with the new circuits. The fields were computed based on the maximum loadings of the lines, which would lead to the highest EMF values that might exist at the proposed substation. Daily current load levels would normally operate below the maximum load conditions, thereby further reducing nominal EMF values.

The magnetic fields are a function of the electric current, the configuration of the conductors, and the distance from transmission lines. The magnetic fields were estimated at the substation fence to be less than 15.02 milligauss, comparable to that of common household appliances. For example, a corded power tool has a magnetic field output of 123 milligauss. The maximum magnetic field scenarios for the proposed substation sites are listed in the application (Table 06-3). The magnetic fields generated by the substation are attenuated very rapidly as the distance from them increases. Past experience has shown that, within 100 feet of the fence line of the substation, the magnetic field is not of sufficient strength to be measureable because the background effects overwhelm the measurements. The nearest residence is over 800 feet from the Preferred Site, and about 470 feet from the Alternate Site. Therefore, the Applicant expects that magnetic fields would not affect residences near the Fulton Substation.

The electric field is a function of the voltage, the line configuration, and the distance from the substation. Electric fields are produced by voltage or electric charge. For example, a plugged in

lamp cord produces an electric field, even if the lamp is turned off. The electric field would be less than 1.96 kilovolt/meter at the substation fence. The electric fields are easily shielded by physical structures such as the walls of a house, foliage, or other barriers. Also, the substation would have a significant grounding network and a fence that would capture any stray voltage. Therefore, the substation would not pose any electric field issues.

Recommended Findings

Staff recommends that the Board find that the proposed facility would serve the public interest, convenience, and necessity, and therefore complies with the requirements specified in ORC Section 4906.10(A)(6), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(7)

AGRICULTURAL DISTRICTS

Pursuant to ORC Section 4906.10(A)(7), the Board must determine the facility's impact on the agricultural viability of any land in an existing agricultural district within the Preferred and Alternate site of the proposed utility facility. The agricultural district program was established under ORC Chapter 929. Agricultural district land is exempt from sewer, water, or electrical service tax assessments. Agricultural land can be classified as an agricultural district through an application and approval process that is administered through local county auditors' offices. Eligible land must be devoted exclusively to agricultural production or be qualified for compensation under a land conservation program for the preceding three calendar years. Furthermore, eligible land must be at least ten acres or produce a minimum average gross annual income of \$2,500.

Five agricultural district land parcels were identified within 1,000 feet of the Preferred and Alternate sites. The Alternate Site is located on an agricultural district parcel, and would result in the loss of approximately five acres of agricultural district land. None of the five parcels is within 100 feet of the Preferred Site; therefore, no impacts would be expected.

Recommended Findings

The Staff recommends that the Board find that the impact of the proposed facility on the viability of existing agricultural land in an agricultural district has been determined, and therefore complies with the requirements specified in ORC Section 4906.10(A)(7), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this report entitled Recommended Conditions of Certificate.

Considerations for ORC Section 4906.10(A)(8)

WATER CONSERVATION PRACTICE

Pursuant to ORC Section 4906.10(A)(8), the proposed facility must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives.

Because the facility would not require the use of water for operation, water conservation practice as specified under ORC 4906.10(A)(8) is not applicable to the project.

Recommended Findings

The Staff recommends that the Board find that the requirements specified in ORC Section 4906.10(A)(8) are not applicable to this project.

IV. RECOMMENDED CONDITIONS OF CERTIFICATE

Following a review of the application filed by ATSI and the record compiled to date in this proceeding, Staff recommends that a number of conditions become part of any certificate issued for the proposed facility. These recommended conditions may be modified as a result of public or other input received subsequent to issuance of this report.

GENERAL CONDITIONS

Staff recommends the following conditions to ensure conformance with the proposed plans and procedures as outlined in the case record to date, and to ensure compliance with all conditions listed in this staff report:

- (1) The facility shall be installed at the Applicant's Preferred Site as presented in the application, and as modified and/or clarified by the Applicant's supplemental filings and further clarified by recommendations in this *Staff Report of Investigation*.
- (2) The Applicant shall utilize the equipment and construction practices as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in this *Staff Report of Investigation*.
- (3) The Applicant shall implement the mitigation measures as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in this *Staff Report of Investigation*.
- (4) The Applicant shall conduct a preconstruction conference prior to the start of any construction activities. Staff, the Applicant, and representatives of the prime contractor and all subcontractors for the project shall attend the preconstruction conference. The conference shall include a presentation of the measures to be taken by the Applicant and contractors to ensure compliance with all conditions of the certificate, and discussion of the procedures for on-site investigations by Staff during construction. Prior to the conference, the Applicant shall provide a proposed conference agenda for Staff review. The Applicant may stage separate preconstruction meetings for grading versus clearing work.
- (5) At least 30 days before the preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, one set of detailed engineering drawings of the final project design, including the substation, temporary and permanent access roads, construction staging areas, and any other associated facilities and access points, so that Staff can determine that the final project design is in compliance with the terms of the certificate. The final project layout shall be provided in hard copy and as geographically-referenced electronic data. The final design shall include all conditions of the certificate and references at the locations where the Applicant and/or its contractors must adhere to a specific condition in order to comply with the certificate.
- (6) If any changes are made to the project layout after the submission of final engineering drawings, all changes shall be provided to Staff in hard copy and as geographicallyreferenced electronic data. All changes outside the environmental survey areas and any changes within environmentally-sensitive areas will be subject to Staff review and acceptance, to ensure compliance with all conditions of the certificate, prior to construction in those areas.

- (7) Within 60 days after the commencement of commercial operation, the Applicant shall submit to Staff a copy of the as-built specifications for the entire facility. The Applicant shall provide as-built drawings in both hard copy and as geographically-referenced electronic data.
- (8) The certificate shall become invalid if the Applicant has not commenced a continuous course of construction of the proposed facility within five years of the date of journalization of the certificate.
- (9) As the information becomes known, the Applicant shall provide to Staff the date on which construction will begin, the date on which construction was completed, and the date on which the facility begins commercial operation.

SOCIOECONOMIC CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Socioeconomic Impacts** section of the <u>Nature of Probable Environmental Impact</u>:

(10) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving and hoe ram operations, if required, shall be limited to the hours between 10:00 a.m. to 5:00 p.m., Monday through Friday. Construction activities that do not involve noise increases above ambient levels at sensitive receptors are permitted outside of daylight hours when necessary. The Applicant shall notify property owners or affected tenants within the meaning of Rule 4906-5-08(C)(3), OAC, of upcoming construction activities including potential for nighttime construction activities.

ECOLOGICAL CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Ecological Impacts** section of the <u>Nature of Probable Environmental Impact</u>:

- (11) The Applicant shall contact Staff, ODNR, and the USFWS within 24 hours if state or federal threatened or endangered species are encountered during construction activities. Construction activities that could adversely impact the identified plants or animals shall be halted until an appropriate course of action has been agreed upon by the Applicant, Staff, and ODNR in coordination with the USFWS. Nothing in this condition shall preclude agencies having jurisdiction over the facility with respect to threatened or endangered species from exercising their legal authority over the facility consistent with law.
- (12) The Applicant shall contact the Ohio Department of Natural Resources, Division of Wildlife, (419) 898-0960, for the location(s) of the eagle nest(s) in the county. If any active nests are located within 660 feet of the project, then additional coordination with the ODNR-DOW and OPSB Staff is required.

AIR, WATER, SOLID WASTE, AND AVIATION CONDITIONS

Staff recommends the following conditions to address the requirements discussed in <u>Air, Water,</u> Solid Waste, and Aviation:

(13) Prior to the commencement of construction activities that require permits or authorizations by federal or state laws and regulations, the Applicant shall obtain and comply with such

- permits or authorizations. The Applicant shall provide copies of permits and authorizations, including all supporting documentation, to Staff within seven days of issuance or receipt by the Applicant. The Applicant shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference.
- (14) At least seven days before the preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, a copy of all NPDES permits including its approved SWPPP, approved SPCC procedures, and its erosion and sediment control plan. Any soil issues must be addressed through proper design and adherence to the Ohio EPA BMPs related to erosion and sedimentation control.
- (15) The Applicant shall employ the following erosion and sedimentation control measures, construction methods, and BMPs when working near environmentally-sensitive areas and/or when in close proximity to any watercourses, in accordance with the Ohio NPDES permit(s) and SWPPP obtained for the project:
 - (a) During construction of the facility, seed all disturbed soil, except within actively cultivated agricultural fields, within seven days of final grading with a seed mixture acceptable to the appropriate County Cooperative Extension Service. Denuded areas, including spoils piles, shall be seeded and stabilized within seven days, if they will be undisturbed for more than 21 days. Re-seeding shall be done within seven days of emergence of seedlings as necessary until sufficient vegetation in all areas has been established.
 - (b) Inspect and repair all erosion control measures after each rainfall event of one-half of an inch or greater over a 24-hour period, and maintain controls until permanent vegetative cover has been established on disturbed areas.
 - (c) Delineate all watercourses, including wetlands, by fencing, flagging, or other prominent means.
 - (d) Avoid entry of construction equipment into watercourses, including wetlands, except at specific locations where construction has been approved.
 - (e) Prohibit storage, stockpiling, and/or disposal of equipment and materials in these sensitive areas.
 - (f) Locate structures outside of identified watercourses, including wetlands, except at specific locations where construction has been approved.
- (16) Divert all storm water runoff away from fill slopes and other exposed surfaces to the greatest extent possible, and direct instead to appropriate catchment structures, sediment ponds, etc., using diversion berms, temporary ditches, check dams, or similar measures. The Applicant shall remove all temporary gravel and other construction staging area and access road materials after completion of construction activities, as weather permits. Impacted areas shall be restored to preconstruction conditions in compliance with the NPDES permit(s) obtained for the project and the approved SWPPP created for this project.
- (17) The Applicant shall comply with fugitive dust rules by the use of water spray or other appropriate dust suppressant measures whenever necessary.

APPENDIX

1. DOCKETING RECORD

CASE NUMBER: 11-4152-EL-BSB

DESCRIPTION: Fulton Substation Project

FILINGS AS OF: 10/29/2012

10/12/2012	Affidavit of Proof of Mailing of Notification Letters electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.
10/12/2012	Proof of Pub Proof of Publication First Public Notice of Hearings electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.
09/26/2012	Motion to seal portions of record of these proceedings and Memorandum in Support filed by Robert J. Schmidt Jr on behalf of American Transmission Systems Inc.
	Confidential treatment of documents : Trade secrets and CE II filed by Robert J. Schmidt Jr. on behalf of American Transmission Systems Inc. (16 pages)
09/21/2012	Service Notice
09/21/2012	Attorney Examiner Entry regarding procedural schedule electronically filed by Vesta R Miller on behalf of Katie L. Stenman, Administrative Law Judge, Ohio Power Siting Board.
	Letter of Notification submitted by Assistant Attorney General John H. Jones on behalf of the Staff of the Ohio Power Siting Board stating that the Staff does not object to the Applicant's June 1, 2012 Motion for Certain Waivers, electronically filed by Kimberly L Keeton on behalf of Ohio Power Siting Board.
	Correspondence of FirstEnergy Service Company regarding application fee paid by check, filed by Scott M. Humphrys.
09/06/2012	Affidavit of proof of service electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.
	Letter of response to the ATSI that the Fulton Substation Project application filed on 6/15/12 is in compliance and the Board's Staff will begin its review of the application filed by T. Snitchler, OPSB.
	Application for a certificate of Environmental Compatibility and Public Need - Fulton Substation Project filed by S. Humphrys on behalf of FirstEnergy Service Company.
	Motion for Certain Waivers and Memorandum in Support electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.
07/12/2011	In the matter of the pre-application notification for the Fulton Substation Project.



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10/29/2012 9:52:10 AM

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Case No(s). 11-4152-EL-BSB

Summary: Staff Report Filed electronically filed by Mr. James S. O'Dell on behalf of Staff of OPSB